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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,650	01/20/2004	Frederic M. Newman	08876.105017	9872

7590 01/13/2006

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EXAMINER

AURORA, REENA

ART UNIT	PAPER NUMBER
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2862

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/760,650		NEWMAN, FREDERIC M.	
	Examiner		Art Unit	
	Reena Aurora		2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 8, 10 - 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 8, 10 - 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to amendment received on 12/20/05.

Applicant has canceled claim 9 and added new claims 16 – 24.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Dillenbeck et al. (6,802,373).

As to claim 1 - 3, Bailey discloses a method for counting pipe joints comprising producing a magnetic field (104, 106, fig. 3) near the well, moving the plurality of pipe segments (103) into or out of the well, detecting the changes (105) in the magnetic field caused by the passing of the pipe segment connectors (103) through the magnetic field, and counting the numbers of changes in the magnetic field to thereby produce a pipe segment count (page 2, lines 32 – 57 and 90 - 124). Bailey's fails to disclose that the magnetic field detection device is embedded into a wiper rubber. Dillenbeck et al. (hereinafter Dillenbeck) discloses an apparatus and method of detecting interfaces between well fluids wherein the magnetic field detection device may be embedded in rubber wiper (col. 4, lines 30 - 32). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device

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of Bailey with the teachings of Dillenbeck by embedding the magnetic detection device in wiper rubber such that the magnetic field detection device is closer to the pipe segment and would therefore accurately sense the changes in the magnetic field.

As to claim 4, Bailey discloses that the magnetic field detection device is selected from the group consisting of a magnetic induction device, a single magnet, two permanent magnets with like poles pointed in the same direction, Hall effect transducers, magneto sensors, and an energized coil of wire (col. 2, lines 93 - 97).

As to claim 5, Bailey discloses that the changes in the magnetic flux are detected by a voltmeter attached to a coil of wire placed near the device capable of producing the magnetic field (page 2, lines 114 - 120).

As to claim 6, Bailey discloses the changes in magnetic field are counted using a device selected from the group consisting of a relay-driven stepping mechanical counter and a GUI (page 1, lines 35 – 48 and page 2, lines 79 - 83).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 10 and 14 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Dillenbeck et al. (6,802,373) as applied to claims 1 - 6 above, and further in view of Relton et al. (6,720,764).

As to claims 7, 8 and 10, Bailey's and Dillenbeck fail to show that the pipe segment count is fed into a computer system. Relton discloses feeding a pipe segment count into a computer system (51) (col. 8, lines 6 - 16). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey in view of the teachings of Dillenbeck and further with the teachings of Relton such that including a computer and feeding a pipe segment count into it would process the information faster and accurately.

As to claims 14 and 15, Bailey and Dillenbeck fails to disclose that an alarm sounds each time a pipe segment passing into or out of the well. Relton et al. (hereinafter Relton) discloses a sensor system for detection of tool joints wherein an alarm sounds each time a pipe segment passing into or out of the well (fig. 5, col. 9, lines 61 - 65). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey in view of the teachings of Dillenbeck and further with the teachings of Relton such that including an alarm in Bailey's device would notify the operator instantly of the presence of the tool joints.

Claims 11 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Dillenbeck et al. (6,802,373) as applied to claims 1 - 6 above, and further in view of Edens et al. (5,671,155).

As to claims 11 - 13, Bailey and Dillenbeck fails to disclose a processing module to filter the signal from the magnetic flux measuring device. Edens et al. (hereinafter Edens) discloses an apparatus and method for detecting and displaying irregularities in

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ferrous pipe wherein Edens teaches that it is well known in the art to filter noise from the signal to produce signal representative of changes in magnetic field (col. 1, lines 27 - 31). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey's in view of the teachings of Dillenbeck and further with the teachings of Edens by filtering the noise in the signal from the magnetic field measuring device to accurately sense the changes in the magnetic field.

Claims 16 - 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Edens et al. (5,671,155).

As to claim 16, Bailey discloses a method for counting pipe joints comprising producing a magnetic field (104, 106, fig. 3) near the well, moving the plurality of pipe segments (103) into or out of the well, detecting the changes (105) in the magnetic field caused by the passing of the pipe segment connectors (103) through the magnetic field, and counting the numbers of changes in the magnetic field to thereby produce a pipe segment count (page 2, lines 32 – 57 and 90 - 124). Bailey's fails to disclose a processing module to filter the noise in the signal from the magnetic field measuring device. Edens et al. (hereinafter Edens) discloses an apparatus and method for detecting and displaying irregularities in ferrous pipe wherein Edens teaches that it is well known in the art to filter noise from the signal to produce signal representative of changes in magnetic field (col. 1, lines 27 - 31). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the

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device of Bailey with the teachings of Edens by filtering the noise in the signal from the magnetic field measuring device to accurately sense the changes in the magnetic field.

As to claim 17, Bailey discloses that the changes in the magnetic flux are detected by a voltmeter attached to a coil of wire placed near the device capable of producing the magnetic field (page 2, lines 114 - 120).

Claims 20 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Edens et al. (5,671,155) as applied to claim 16 above, and further in view of Dillenbeck et al. (6,802,373).

As to claims 20 - 22, Bailey's and Edens fails to disclose that the magnetic field detection device is embedded into a wiper rubber. Dillenbeck et al. (hereinafter Dillenbeck) discloses an apparatus and method of detecting interfaces between well fluids wherein the magnetic field detection device may be embedded in rubber wiper (col. 4, lines 30 - 32). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey in view of the teachings of Edens and further with the teachings of Dillenbeck by embedding the magnetic detection device in wiper rubber such that the magnetic field detection device is closer to the pipe segment and would therefore accurately sense the changes in the magnetic field.

Claims 18, 19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (GB 1602065) in view of Edens et al. (5,671,155) as applied to claim 16 above, and further in view of Relton et al. (6,720,764).

As to claims 18 and 19, Bailey's and Edens fails to show that the pipe segment count is fed into a computer system. Relton discloses feeding a pipe segment count into a computer system (51) (col. 8, lines 6 - 16). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey in view of the teachings of Edens and further with the teachings of Relton such that including a computer and feeding a pipe segment count into it would process the information faster and accurately.

As to claims 23 and 24, Bailey and Edens fails to disclose that an alarm sounds each time a pipe segment passing into or out of the well. Relton et al. (hereinafter Relton) discloses a sensor system for detection of tool joints wherein an alarm sounds each time a pipe segment passing into or out of the well (fig. 5, col. 9, lines 61 - 65). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of Bailey in view of the teachings of Edens and further with the teachings of Relton such that including an alarm in Bailey's device would notify the operator instantly of the presence of the tool joints.

Response to Arguments

Applicant's arguments with respect to claims 1 – 8, 10 - 24 have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Reena Aurora